Serial No.: 09/550,867
Examiner: Derrick W. Ferris

In the claims:

Please cancel claims 3, 6, 11 and 13.

Please amend the claims as follows:

Claim 1 (currently amended): A method for conserving addresses in a finite address domain, comprising:

reserving an address in the domain for intra-switch only applications, said address being a media access control (MAC) address;

assigning the address to a switch, said switch comprising a plurality of interfaces coupled to a backplane;

interconnecting the switch in a network; and

using the address solely within the switch, whereby data are distributed to at least one of the plurality of interfaces via the backplane without transmitting the address to the network from any of the plurality of interfaces.

Claim 2 (previously amended): The method according to claim 1, further comprising repeating the assigning, interconnecting and using steps for a second switch in a second network.

Claim 3 (currently canceled)

Claim 4 (currently amended): A method for conserving addresses in a finite address domain, comprising:

reserving a first address in the domain for a particular manufacturer, the first address being a media access control (MAC) address;

reserving a second address in the domain for intra-switch only applications, the second address being a MAC address;

assigning the first address and the second address to a switch, said switch comprising a plurality of interfaces coupled to a backplane;

interconnecting the switch to a transmission medium;

transmitting the first address on the transmission medium; and

using the second address solely within the switch to distribute data to at least one of the plurality of interfaces via the backplane without transmitting the second address on the transmission medium.

Claim 5 (original): The method according to claim 4, further comprising:

requesting allocation of a reserved address from the domain; and

allocating the first address in response to the request if the requester is the particular manufacturer.

Claim 6 (currently canceled)

Claim 7 (currently amended): A method for conserving addresses in a finite address domain, comprising:

reserving a first media access control (MAC) address in the domain for a first manufacturer;

reserving second MAC address in the domain for a second manufacturer;

assigning the first MAC addresses and a third MAC address to a switch manufactured by the first manufacturer comprising a first plurality of interfaces coupled to a first backplane;

assigning the second MAC address and the third MAC address to a switch manufactured by the second manufacturer comprising a second plurality of interfaces coupled to a second backplane;

interconnecting the switches to respective transmission media;

applying the first MAC address and the second MAC address on the respective transmission media; and

applying the third MAC address solely within the respective switches, whereby data are distributed to at least one of the plurality of interfaces of the respective switches via the

respective backplane without transmitting the third MAC address to the respective transmission media.

Claim 8 (currently amended): The method according to claim 7, further comprising:

allocating the first MAC address to the first manufacturer in response to a request by the first manufacturer; and

allocating the second MAC address to the second manufacturer in response to a request by the second manufacturer.

Claim 9 (currently amended): A switch operative in a network and having a plurality of media access control (MAC) addresses assigned thereto including at least one organizationally unique address and at least one organizationally redundant address, wherein the organizationally redundant address is used solely within the switch, whereby data are distributed via a switch backplane without transmitting the at least one organizationally redundant address on the network.

Claim 10 (previously amended): The switch according to claim 9, wherein the organizationally unique address is transmitted outside the switch.

Claim 11 (currently canceled)

Claim 12 (currently amended): A network, comprising:

a first switch having a first media access control (MAC) address and a second MAC address assigned thereto;

a second switch having the first MAC address and a third MAC address assigned thereto; and

a transmission medium interconnecting the first switch and the second switch;

wherein the first MAC address is transmitted solely within the first switch and the second switch, whereby data are distributed between a plurality of interfaces coupled to a backplane, and

wherein the second MAC address and the third MAC address are transmitted between the first switch and the second switch on the transmission medium.

Claim 13 (currently canceled)

Claim 14 (previously amended): A method for conserving MAC addresses, comprising:

reserving a MAC address for intra-device only applications;

assigning the MAC address to a device, said device comprising a plurality of interfaces coupled to a backplane;

interconnecting the device in a network; and

using the MAC address solely within the device, whereby data are distributed to at least one of the plurality of interfaces via the backplane without transmitting the MAC address on the network.

Claim 15 (previously amended): The method according to claim 14, further comprising repeating the assigning, interconnecting and using steps for a second device in a second network.

Claim 16 (original): The method according to claim 14, wherein the device is a switch.

Claim 17 (previously amended): A device operative in a network and having a plurality of MAC addresses assigned thereto including at least one organizationally unique MAC address and at least one organizationally redundant MAC address, wherein the organizationally redundant MAC address is applied solely within the device, whereby data are distributed via a switch backplane without transmitting the organizationally redundant MAC address on the network.

Claim 18 (original): The device according to claim 17, wherein the organizationally unique MAC address is applied outside the device.

Claim 19 (original): A network, comprising:

a first device having a first MAC address and a second MAC address assigned thereto;

a second device having the first MAC address and a third MAC address assigned thereto; and

a transmission medium interconnecting the first device and the second device;

wherein the first MAC address is transmitted solely within the first device and the second device, and the second MAC address and the third MAC address are transmitted between the first device and the second device on the transmission medium.